

**Product Texts**

Zytel® LCPA long chain polyamide resins provide an innovative and growing portfolio of flexible polymers with excellent thermal, chemical, and hydrolysis resistance. The diverse selection of Zytel® LCPA grades is targeted for a range of performance characteristics, balancing temperature resistance, flexibility and low permeation.

**Zytel® 157HSL BK010 is a heat stabilized, weatherable, lubricated polyamide 612 resin that is suitable for molding and extrusion applications.**

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	1.3 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	1.4 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	2500 / 1500	MPa	ISO 527
<sup>[C]</sup> Yield stress	65 / 53	MPa	ISO 527
<sup>[C]</sup> Yield strain	4.4 / 18	%	ISO 527
<sup>[C]</sup> Nominal strain at break	22 / >50	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	N / N	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	4 / 7	kJ/m <sup>2</sup>	ISO 179/1eA

**ASTM Data**

Tensile Strength	60 / -	MPa	ASTM D 638
Elongation at Break	30 / -	%	ASTM D 638
Flexural Modulus	2180 / -	MPa	ASTM D 790
Rockwell Hardness	R 120 /	-	ASTM D 785
Izod Impact notched, 1/8 in	43 / -	J/m	ASTM D 256

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	218 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Glass transition temperature, 10°C/min	60 / *	°C	ISO 11357-1/-2
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	62 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Yellow Card available	yes / *	-	-
<sup>[C]</sup> Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.9 / *	mm	-
Yellow Card available	yes / *	-	-

**ASTM Data**

UL 94 Flame rating	HB	-	UL 94
Thickness tested	1.5	mm	-
DTUL @ 66 psi	150	°C	ASTM D 648
DTUL @ 264 psi	50	°C	ASTM D 648
Melting Temperature	218	°C	ASTM D 3418

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Density	1070 / -	kg/m <sup>3</sup>	ISO 1183
Water Absorption, 24hr	0.3	%	ASTM D 570
Density	1070	kg/m <sup>3</sup>	ASTM D 792

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			

[C] Viscosity number

115 / \*

cm<sup>3</sup>/g

ISO 307, 1157, 1628

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding, Film Extrusion, Pipe/Tube Extrusion, Wire/Cable Extrusion, Other Extrusion, Coating, Blow Molding

**Delivery form**

Pellets, Black

**Additives**

Lubricants, Release agent

**Special Characteristics**

U.V. stabilized or stable to weather, Heat stabilized or stable to heat

**Features**

Weldable

**Chemical Resistance**

General Chemical Resistance

**Applications**

Automotive

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America, Near East/Africa